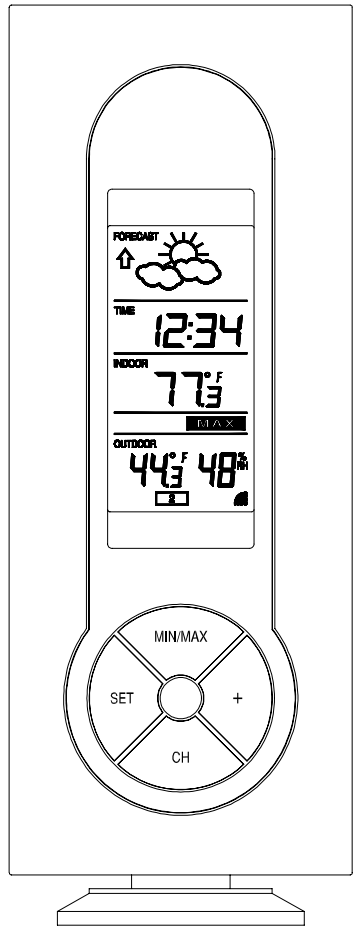
WS-7213U
Wireless 433 MHz
Weather Station

Instruction Manual



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TECHNOLOGY
technology tools for home & office

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INVENTORY OF CONTENTS

1. The indoor weather station (Figure 1)
2. The remote temperature/humidity sensor (TX4U) and mounting bracket. (Figure 2)
3. Mounting hardware.
4. Instruction Manual and Warranty Card.

Figure 1

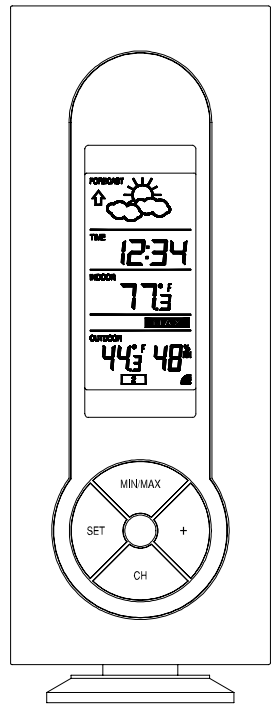
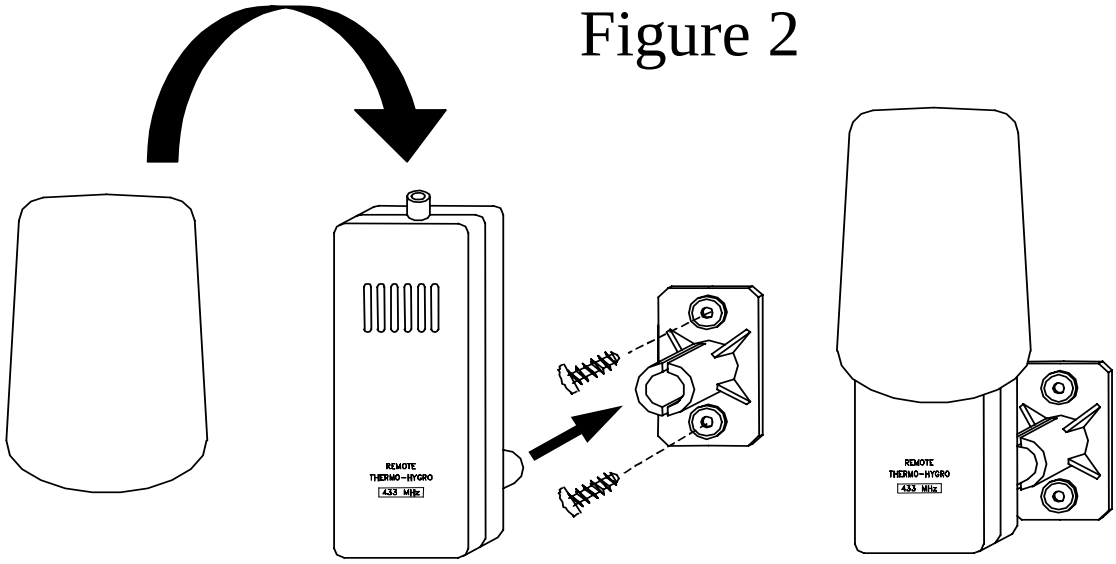


Figure 2



ADDITIONAL EQUIPMENT

(not included)

1. 1 Philips screwdriver.
2. 2 Fresh AA 1.5V batteries.
   (for the indoor weather station)
3. 2 Fresh AA 1.5V batteries.
   (for the temp/humidity sensor)

QUICK SETUP

Hint: Use good quality Alkaline Batteries and avoid rechargeable batteries.

1. Have the indoor weather station and remote temp/humidity sensor 3 to 5 feet apart.
2. Batteries should be out of all units for 10 minutes.
3. Place the batteries into the **remote temp/humidity sensor** first, then into the **indoor weather station**.
   (All remote temp/humidity sensors must be started before the indoor weather station)
4. DO NOT PRESS ANY BUTTONS FOR 15 MINUTES.

In this time the indoor weather station and remote temp/humidity sensor will start to talk to each other and the displays will show both the indoor temperature and an outdoor temperature and humidity. If the indoor weather station do not display both the indoor temperature and the outdoor temperature and humidity after the 15 minutes please retry the set up as shown on page five.

After both indoor temperature and outdoor temperature and humidity are displayed for 10 minutes you can place your remote temp/humidity sensor outdoors and set your time.

Notes on Outdoor Sensor Placement

The remote temp/humidity sensor should be placed in a dry, shaded area. Fog and mist will not harm your remote temp/humidity sensor but direct rain must be avoided.

The remote temp/humidity sensor has a range of 80 feet. Any walls that the signal will have to pass through will reduce distance. An outdoor wall or window can have up to 30 feet of resistance and an interior wall can have up to 20 feet of resistance. Your distance plus resistance should not exceed 80 ft. in a straight line.

Notes on Weather Station Placement

The 80 ft distance is between each indoor weather station and the temp/humidity sensor independently. The placement of one indoor weather station does not affect the placement of a second indoor weather station.

To complete the set up of your indoor weather station after the 10 minutes have passed, please follow the steps below.

1. Press and hold the *"SET"* button for five seconds.
2. The hour will now be flashing.
    a. Press and release the "+" button until the correct hour is shown.

    Note: There is "PM" displayed to the left of the hour when between noon and midnight. During the AM hours this area will be blank.

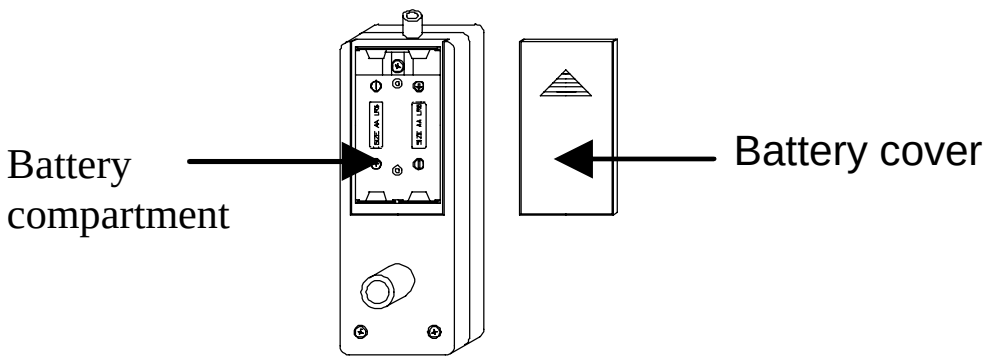
    b. When the correct hour is shown, press and release the *"SET"* button once.
3. The minutes will now be flashing.
    a. Press and release the "+" button until the correct minutes are displayed.

Press and release the SET button once more and you are done.

DETAILED SETUP GUIDE

I. BATTERY INSTALLATION

A. REMOTE TEMP/HUMIDITY SENSOR

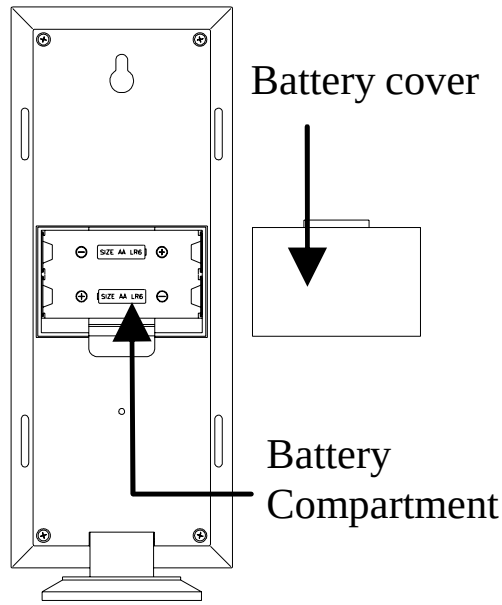


1. Remove the mounting bracket.
2. Remove battery cover
3. Observing the correct polarity, install 2 AA batteries—make sure they do not spring free, or start-up problems may occur.
4. Replace cover.

B. INDOOR WEATHER STATION

Note: After the batteries are installed, **DO NOT** press any buttons for 15 minutes. This may interfere with the signals, causing temperatures to register incorrectly.

1. Remove the battery cover on the backside. To do this, push up and pull out.
2. Observing the correct polarity, install 2 AA batteries.



3. Replace battery cover.
4. Wait 15 minutes or until both the indoor and outdoor temperatures are shown on the indoor weather station.

5. The indoor weather station should now show: “-:- -” in the TIME LCD, indoor temperature in the INDOOR LCD and outdoor temperature and humidity in the OUTDOOR LCD.

II. SETTING THE TIME

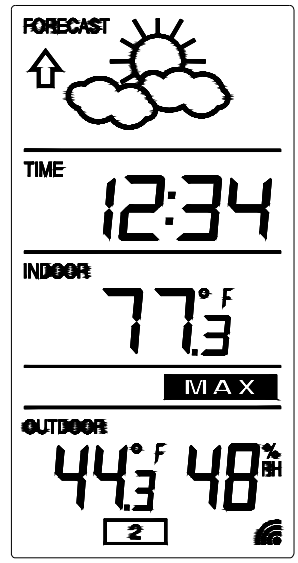
1. Press and hold the “*SET*” button for 5 seconds.
2. The hour will begin to flash.
3. Press and release the “+” button to advance the hour to your desired hour.
4. Press and release the “*SET*” button to move to the minute setting.
5. The minutes will begin to flash.
6. Press and release the “+” button to set the minutes.
7. Press and release the “*SET*” button to activate the clock.

Note: There is “PM” displayed to the left of the hour when between noon and midnight. During the AM hours this area will be blank.

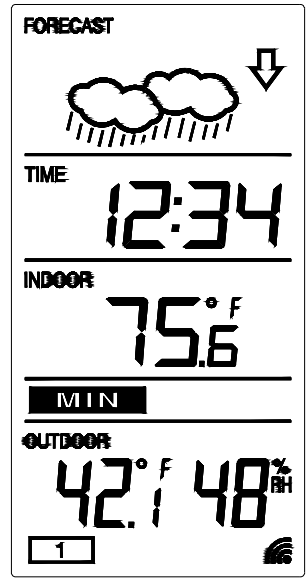
FEATURES

A. MINIMUM AND MAXIMUM TEMPERATURES

1. Press and release the "*MIN/MAX*" button, "MAX" appears at the bottom of the display and the recorded maximum temperatures are displayed.



2. Press and release the "*MIN/MAX*" button to toggle to the minimum temperatures, "MIN" appears at the bottom of the display and the recorded minimum temperatures are



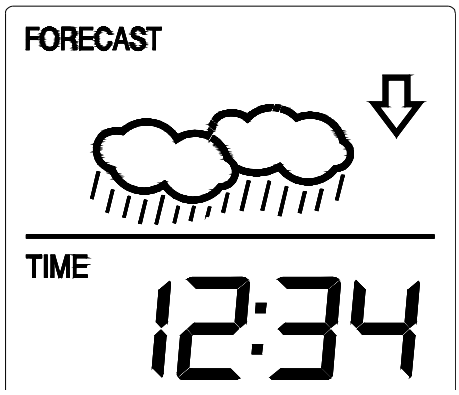
displayed.

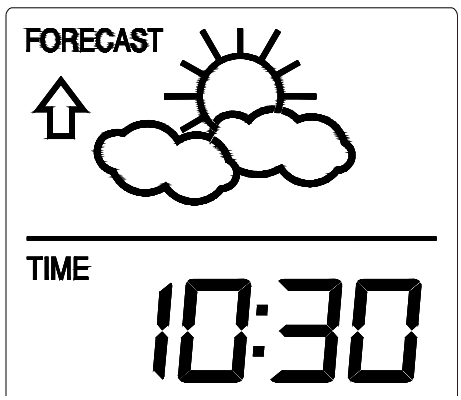
B. RESETTING THE MINIMUM AND MAXIMUM TEMPERATURES

To reset both the minimum and maximum temperatures—press and hold the *"MIN/MAX"* button for 5 seconds.

C. WEATHER FORECAST

The weather forecasting feature is estimated to be 75% accurate. The weather forecast is based solely upon the change of air pressure over time. The WS-7213U averages past air-pressure readings to provide an accurate forecast—creating a necessity to disregard all weather forecasting for 12-24 hours after the unit has been set-up, reset, or moved from one altitude to another (i.e. from one floor of a building to another floor). In areas where the weather is not affected by the change of air pressure, this feature will be less accurate.

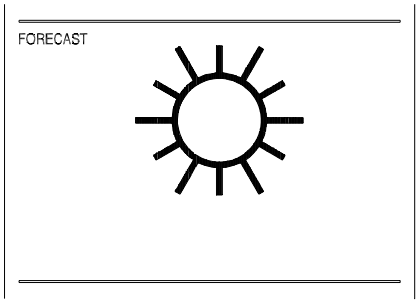




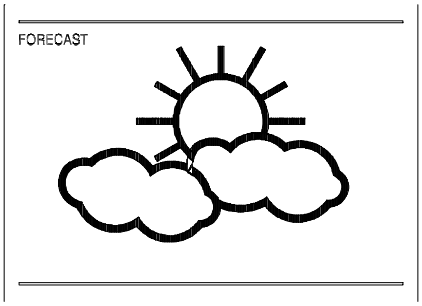
1. Weather Icons

There are 3 possible weather icons that will be displayed in the FORECAST LCD:

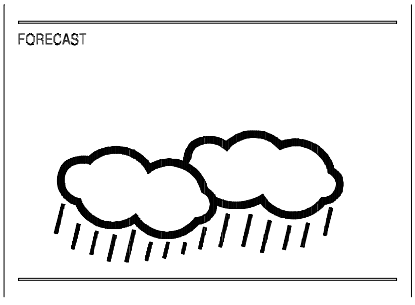
Sunny—indicates that the weather is expected to improve (not that the weather will be sunny).



Sun with Clouds—indicates that the weather is expected to be fair (not that the weather will be sunny with clouds).



Clouds with Rain—indicates that the weather is expected to get worse (not that the weather will be rainy).



The weather icons change when the unit detects a change in air pressure. The icons change in order, from “sunny” to “partly sunny” to “cloudy” or the reverse. It will not change from “sunny” directly to “rainy”, although it is possible for the change to occur quickly. If the symbols do not change then the weather has not changed, or the change has been slow and gradual.

2. Weather Tendency Arrows

Other possible displays in the FORECAST LCD are 2 weather tendency arrows, one that points up (on the left side of the LCD) and one that points down (on the right side of the LCD). These arrows reflect current changes in the air pressure. An arrow pointing up indicates that the air pressure is increasing and the weather is expected to improve or remain good. An arrow

pointing down indicates that the air pressure is decreasing and the weather is expected to become worse or remain poor. No arrow means the pressure is stable and the weather should remain relatively the same

D. ADDING ADDITIONAL REMOTE TEMP/HUMIDITY SENSORS (OPTIONAL)

The WS-7213U is able to receive signals from 3 different remote temperature, temperature/humidity sensors. Following are some brief instructions for the basic set-up of remote sensor units with the WS-7213U. These extra sensors can be purchased through the same dealer as this unit, or by contacting La Crosse Technology directly. A TX6 will monitor temperature only, a TX3U will monitor temperature and display the temperature on its LCD, the TX3UP will

monitor the temperature via a probe for use in pools, spas, etc and the TX4U will monitor temperature and humidity.

Note: When setting up multiple units it is important to remove the batteries from all existing units in operation, then to insert batteries first into all the remote sensor units, and in numeric sequence. Second, install batteries into the indoor weather station. Transmission problems will arise if this is not done correctly and if the total time for set-up exceeds 6 minutes.

1. It is necessary to remove the batteries from all units currently in operation.
2. Remove the battery covers to all remote sensor units.
3. Place all remote sensor units in a numeric sequential order.
4. In sequential order, install batteries (follow the same battery installation

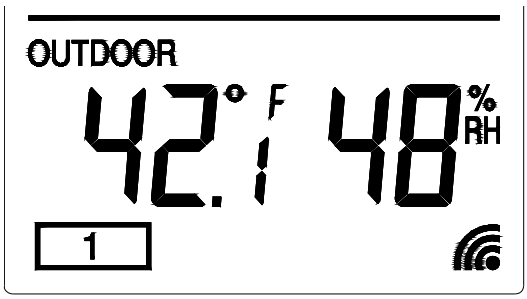
procedures seen in section “I” of the Detailed Set-Up Guide) into the remote sensors.

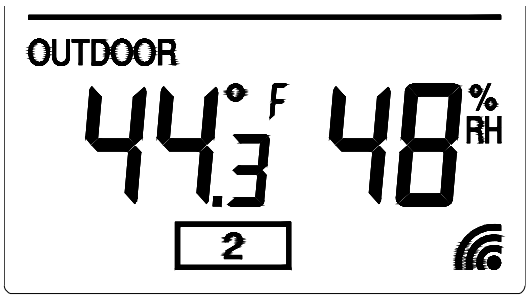
5. Install batteries into the indoor weather station.

Follow the Detailed Set-Up Guide for programming and operating instructions.

E. VIEWING AND OPERATING WITH MULTIPLE REMOTE SENSOR UNITS

1. To view the temperature of a different remote sensor unit, press and release the “*CH*” button. A shift from one “boxed” number to the next should be observed in the OUTDOOR LCD.





2. To view the Minimum/Maximum temperature: first select from which remote temp/humidity sensor to read data from (indicated by the “boxed” number). Pressing and releasing the *“MIN/MAX”* button will toggle through the minimum and maximum indoor temperature, and the minimum and maximum outdoor temperature.
3. To reset the Minimum/Maximum readings, press and hold the *“MIN/MAX”* button for five seconds.

MOUNTING

Note: To achieve a true temperature reading, avoid mounting in direct sunlight. We recommend that you mount the remote temp/humidity sensor on an outside North-facing wall. The sending range is 80ft; obstacles such as walls, concrete, and large metal objects will reduce the range. Place both units in their desired location temporarily to test reception capability before permanently mounting.

A. REMOTE TEMP/HUMIDITY SENSOR

1. Remove the mounting bracket from the remote temp/humidity sensor
2. Mount using either screws or adhesive tape.
3. Reattach the remote temp/humidity sensor to the mounting bracket.

B. THE WEATHER STATION

1. The indoor weather station comes with the table stand already mounted. If you wish to use the table-stand, all that is required is to place the indoor weather station in your desired location.
2. To wall mount:
   a) Remove the table stand by pulling down on the stand from the rear and rotating forward.
   b) Fix a screw (not included) into the desired wall.
   c) Place the indoor weather station onto the screw using the hanging hole on the backside.
   d) Gently pull the indoor weather station down to lock the indoor weather station into place.

TROUBLESHOOTING

NOTE: *For problems not solved, please contact La Crosse Technology via e-mail or phone, or visit our website, www.lacrossetechnology.com*

Problem: The LCD is faint
Solution: Replace batteries

Problem: No outdoor temperature or humidity is displayed.
Solution:

1) First try to re-establish communication between the remote sensor and indoor weather station by moving both units to within three to five feet of each other. Wait about ten minutes and then check for a temperature and humidity.
2) If this does not work please remove the batteries from both units and restart the system (please see Detailed Set-up on page nine through eleven).

Note: Please make sure when restarting the system that all batteries are fresh.

3) Once the system has been reset and you have a temperature and humidity reading from the sensor, temporarily place the remote temp/humidity sensor in the previous location.

Note: If there is a outdoor temperature and humidity displayed when the two units are close together there was either too much distance between the two units previously or some type of interference that was causing poor reception.

4) If after 15 minutes the temperature and humidity are not displayed you will need to choose another location for placement of the temp/humidity sensor.
5) The best way of doing this is to move the sensor 10 feet closer to the indoor weather station.
6) After moving the remote temp/humidity sensor please wait 15 minutes to give the indoor weather station time to re-acquire the signal.

Problem: Temperatures do not match if units are placed next to each other.
Solution: Each temp/humidity sensor is manufactured to be accurate to within 2 degree plus or minus and under normal conditions. It is possible for two temp/humidity sensors to be as much as 4 degrees different. The difference can be exaggerated further because the temp/humidity sensors are designed for different working environments. The indoor sensor is less responsive to ambient air currents because of the shielding effect of the indoor weather station's case. In addition, the casing can act as a heat sink to absorb and store heat from external sources (i.e. handling of the case or radiant heat). In addition, the much greater range of the outdoor temp/humidity sensor requires a different calibration curve than the indoor range. Error is usually greater at the extreme ends of a range, making it harder to compare different ranges with different curves. Under non-laboratory conditions, it is difficult to

compensate for the above factors and obtain an accurate comparison.

MAINTENANCE AND CARE INSTRUCTIONS

- Extreme temperatures, vibration, and shock should be avoided to prevent damage to the units.
- Clean displays and units with a soft, damp cloth. Do not use solvents or scouring agents; they may mark the displays and casings.
- Do not submerge in water.
- Do not subject the units to unnecessary heat or cold by placing them in the oven or freezer.
- Opening the casings invalidates the warranty. Do not try to repair the unit. Contact La Crosse Technology for repairs.

SPECIFICATIONS

Transmitting Frequency	433MHz
Measuring Range - Temperature	
Indoor Weather Station: Indoor	32°F to 140°F with 0.1°F resolution.
Indoor Weather Station: Outdoor	-21.8 °F to 139.8°F with 0.1°F resolution.
Temp accuracy	+/- 1°F
Measuring Range – Humidity	
Indoor Weather Station:	20% to 95% with 1% resolution (“—“ displayed when outside this range)
Temperature Checking Interval	
Indoor:	Every 10 seconds
Outdoor:	Three times in 10 minutes
Humidity Checking Interval	
Outdoor:	Three times in 10 minutes

Transmitting range:	Maximum 80 feet (25m) open space
Batteries—(Alkaline recommended)	
Remote Temp/Humidity Sensor	2 x AA, 1.5V
Indoor Weather Station	2 x AA, 1.5V
Dimensions: (H x W x D)	
Indoor Weather Station	7.5” x 3” x 1.12” (excluding table stand) (190 x 76 x 28 mm)
Remote Temp/Humidity Sensor	4.33” x 1.57” x 0.78” (110 x 40 x 20 mm) Rain Protector 2.25”Ø x 4.75” high (57 mm∅ x 120 mm high)
Battery life	Approximately 1 year

WARRANTY INFORMATION

La Crosse Technology, Ltd provides a 1-year limited warranty on this product against manufacturing defects in materials and workmanship.

This limited warranty begins on the original date of purchase, is valid only on products purchased and used in North America and only to the original purchaser of this product. To receive warranty service, the purchaser must contact La Crosse Technology, Ltd for problem determination and service procedures. Warranty service can only be performed by a La Crosse Technology, Ltd authorized service center. The original dated bill of sale must be presented upon request as proof of purchase to La Crosse Technology, Ltd or La Crosse Technology, Ltd's authorized service center.

La Crosse Technology, Ltd will repair or replace this product, at our option and at no charge as stipulated herein, with new or reconditioned parts or products if found to be defective during the limited warranty period specified above. All replaced parts and products become the property of La Crosse Technology, Ltd and must be returned to La Crosse Technology, Ltd. Replacement parts and products assume the remaining original warranty, or ninety (90) days, whichever is longer. La Crosse Technology, Ltd will pay all expenses for labor and materials for all repairs covered by this warranty. If necessary repairs are not covered by this warranty, or if a product is examined which is not in need or repair, you will be charged for the repairs or examination. The owner must pay any shipping charges incurred in getting your La Crosse

Technology, Ltd product to a La Crosse Technology, Ltd authorized service center. La Crosse Technology, Ltd will pay ground return shipping charges to the owner of the product to a USA address only.

Your La Crosse Technology, Ltd warranty covers all defects in material and workmanship with the following specified exceptions: (1) damage caused by accident, unreasonable use or neglect (including the lack of reasonable and necessary maintenance); (2) damage occurring during shipment (claims must be presented to the carrier); (3) damage to, or deterioration of, any accessory or decorative surface; (4) damage resulting from failure to follow instructions contained in your owner's manual; (5) damage resulting from the performance of repairs or alterations by someone other than an authorized La Crosse Technology, Ltd authorized service center; (6) units used for other than home use (7) applications and uses that this product was not intended or (8) the products inability to receive a signal due to any source of interference.. This warranty covers only actual defects within the product itself, and does not cover the cost of installation or removal from a fixed installation, normal set-up or adjustments, claims based on misrepresentation by the seller or performance variations resulting from installation-related circumstances.

LA CROSSE TECHNOLOGY, LTD WILL NOT ASSUME LIABILITY FOR INCIDENTAL, CONSEQUENTIAL, PUNITIVE, OR OTHER SIMILAR DAMAGES ASSOCIATED WITH THE OPERATION OR MALFUNCTION OF THIS PRODUCT. THIS PRODUCT IS NOT TO BE USED FOR MEDICAL PURPOSES OR FOR PUBLIC INFORMATION. THIS PRODUCT IS NOT A TOY. KEEP OUT OF CHILDREN'S REACH.

This warranty gives you specific legal rights. You may also have other rights specific to your State. Some States do no allow the exclusion of consequential or incidental damages therefore the above exclusion of limitation may not apply to you.

For warranty work, technical support, or information contact:

La Crosse Technology
2809 Losey Blvd. S.
La Crosse, WI 54601
Phone: 608.782.1610
Fax: 608.796.1020

e-mail:
support@lacrossetechnology.com
(warranty work)

sales@lacrossetechnology.com
(information on other products)

web:
www.lacrossetechnology.com

FCC DISCLAIMER

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Freq. 433.92 MHz
La Crosse Technology
Made in China
WS-7213U

FCC ID: OMO-01RX (Receiver)
OMO-01TX (Sensor)

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